



Virginia  
Retirement  
System®

# Investments Report

FOR THE QUARTER ENDING

DECEMBER 31, 2022





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While the last quarter of the calendar year brought some relief to stock and bond markets (+10.0% and +1.9%, respectively), the overall return in 2022 was distinctly negative. Global stocks declined 18.1% and investment grade bonds, generally viewed to be a “safe” asset class, declined 13%. Against this challenging backdrop, the VRS portfolio relied on its broad diversification to help weather the storm.

The table below shows the VRS portfolio performance as well as the Board-approved benchmark and excess return.

As of 12/31/22	FYTD	1 Year	3 Years	5 Years	10 Years
<b>VRS Total Fund</b>	0.7%	-5.3%	7.4%	7.1%	8.1%
<b>Benchmark</b>	-1.8%	-11.2%	3.6%	4.9%	6.7%
<b>Excess Return</b>	2.5%	5.9%	3.8%	2.2%	1.4%

Taking a step back, the last three years have been challenging: a global pandemic, supply chain issues, fiscal and monetary stimulus, the Ukraine-Russia conflict, a spike in inflation followed by increasing interest rates around the globe. Occurrences like these seem momentous in isolation and each has had its own effects on global financial markets. While such events are, by definition, not easily predictable, VRS prepares for an uncertain future by carefully diversifying our investments across multiple asset classes, strategies, regions and forward-looking economic scenarios. Additionally, VRS’ long-term investment horizon allows the investment team to focus on the portfolio’s strategic goal of maximizing return while managing risk within an acceptable range.

These key tenets have helped the VRS Total Fund outperform its benchmark over all the time periods shown here and outperform the long-term return goal of 6.75% over the 3-, 5- and 10-year periods. The portfolio’s exposure to private asset classes and strategies has provided meaningful long-term returns with Private Equity, Real Assets and Credit Strategies all outperforming their respective benchmarks over the longer term 5- and 10-year periods. These strategies provide access to opportunities that are not available in the traditional stock and bond markets, adding meaningful diversification to the portfolio.

As policymakers continue to interpret incoming data and determine the appropriate path for economic policy, the range of outcomes for public and private markets is wide. VRS’ portfolio is positioned to be resilient and ready to capitalize on future opportunities. The investment team remains focused on managing overall risk through broad diversification and meeting the long-term return targets established by the Board.

### TOTAL FUND PERFORMANCE

(Expressed in Percentages, Net of Fees)

	10 Yr.	5 Yr.	3 Yr.	1 Yr.	Qtr.	Month	Fiscal YTD	Cal YTD
<b>Total Public Equity Strategies</b>	<b>8.4</b>	<b>5.1</b>	<b>4.7</b>	<b>-15.2</b>	<b>10.5</b>	<b>-2.9</b>	<b>3.9</b>	<b>-15.2</b>
<i>Benchmark <sup>1</sup></i>	8.2	5.4	4.4	-18.1	10.0	-3.8	2.8	-18.1
<b>Total Fixed Income</b>	<b>1.8</b>	<b>1.1</b>	<b>-1.2</b>	<b>-12.6</b>	<b>2.8</b>	<b>-0.2</b>	<b>-2.0</b>	<b>-12.6</b>
<i>Benchmark <sup>2</sup></i>	1.1	0.1	-2.7	-13.1	2.3	-0.4	-2.3	-13.1
<b>Total Credit Strategies</b>	<b>5.9</b>	<b>5.6</b>	<b>5.5</b>	<b>-2.0</b>	<b>1.3</b>	<b>0.2</b>	<b>0.7</b>	<b>-2.0</b>
<i>Benchmark <sup>3</sup></i>	4.4	3.4	1.5	-4.9	3.2	0.0	3.4	-4.9
<b>Total Real Assets</b>	<b>10.7</b>	<b>9.9</b>	<b>10.9</b>	<b>14.4</b>	<b>1.5</b>	<b>0.6</b>	<b>3.4</b>	<b>14.4</b>
<i>Benchmark <sup>4</sup></i>	8.9	8.2	9.2	12.9	1.3	-0.1	4.0	12.9
<b>Total Private Equity</b>	<b>16.4</b>	<b>18.2</b>	<b>20.4</b>	<b>0.0</b>	<b>-0.9</b>	<b>-1.2</b>	<b>-4.9</b>	<b>0.0</b>
<i>Benchmark <sup>5</sup></i>	10.6	7.1	5.0	-20.9	-6.5	-9.6	-21.2	-20.9
<b>Total Private Investment Partnerships</b>	<b>n/a</b>	<b>9.4</b>	<b>10.9</b>	<b>3.5</b>	<b>0.0</b>	<b>0.0</b>	<b>-1.2</b>	<b>3.5</b>
<i>Benchmark <sup>6</sup></i>	n/a	6.8	6.6	-3.4	-0.7	-3.1	-4.4	-3.4
<b>Total Multi-Asset Public Strategies</b>	<b>n/a</b>	<b>n/a</b>	<b>3.1</b>	<b>-4.9</b>	<b>4.7</b>	<b>-0.9</b>	<b>2.5</b>	<b>-4.9</b>
<i>Benchmark <sup>7</sup></i>	n/a	n/a	2.5	-9.8	4.7	-1.6	1.1	-9.8
<b>Total Fund</b>	<b>8.1</b>	<b>7.1</b>	<b>7.4</b>	<b>-5.3</b>	<b>4.0</b>	<b>-1.1</b>	<b>0.7</b>	<b>-5.3</b>
<i>VRS Custom Benchmark <sup>8</sup></i>	6.7	4.9	3.6	-11.2	3.5	-3.0	-1.8	-11.2

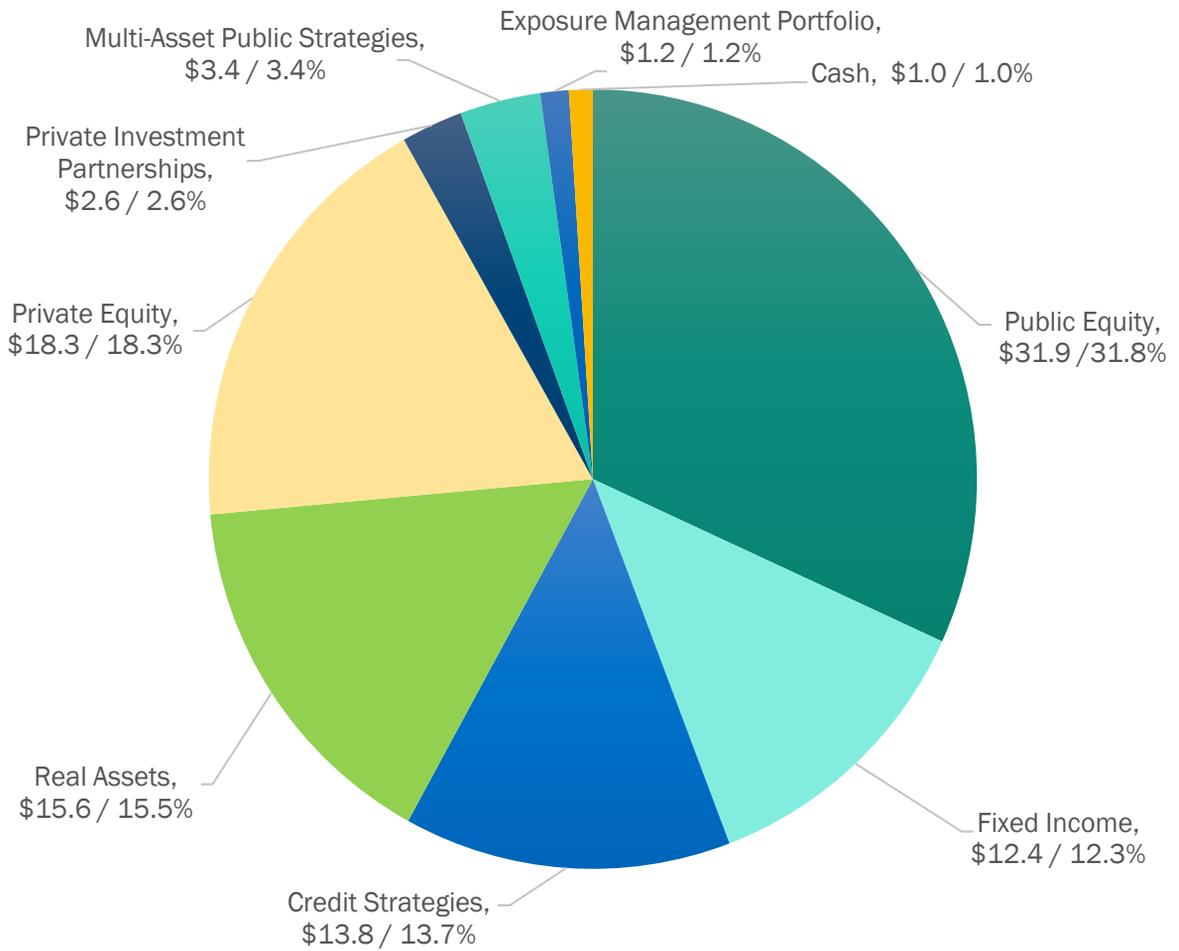
Notes:

- Effective February 2020, the Public Equity Custom Benchmark is the MSCI ACWI IMI (net VRS tax rates) Index.
- Effective July 2020, the Fixed Income Custom Benchmark is a blend of the Bloomberg US Aggregate Bond Index (90%), Bloomberg US High Yield Ba/B 2% Issuer Cap Index (5%), and J.P. Morgan EMBI Global Core Index (5%).
- Effective January 2020, the Credit Strategies Custom Benchmark is a blend of the Morningstar LSTA Performing Loan Index (60%), Bloomberg US High Yield Ba/B 2% Issuer Cap Index (30%), and Bloomberg US Aggregate Bond Index (10%).
- Effective July 2014, the Real Assets Custom Benchmark is the market value weighted blend of the Total Real Estate Benchmark, of which 85% is the NCREIF Private Real Estate Benchmark (ODCE Index (net) lagged by three months) and 15% is the Total REIT Benchmark (FTSE/EPRA/NAREIT Developed REIT Index) and the Other Real Assets Custom Benchmark (the CPI-U Index plus 400 basis points per annum lagged by three months).
- Effective July 2020, the Private Equity Custom Benchmark is the MSCI ACWI IMI Index (net VRS tax rates) lagged by three months.
- Effective July 2021, the Private Investment Partnerships Custom Benchmark is the weighted average of the custom Private Equity Benchmark (MSCI ACWI IMI Index (net VRS tax rates) lagged by three months) (33%), the NCREIF Private Real Estate Benchmark (ODCE Index (net) lagged by three months) (25%), the Other Real Assets Custom Benchmark (the CPI-U Index plus 400 basis points per annum lagged by three months) (8%), the Bloomberg US High Yield Ba/B 2% Issuer Cap Index (17%), and the Morningstar LSTA Performing Loan Index (17%).
- Effective July 2018, the Multi-Asset Public Strategies Custom Benchmark is the market value weighted average of the benchmarks of the mandates (Dynamic Strategies and Risk-Based Investments) within the program.
- The VRS Custom Benchmark is a blend of the Asset Class Benchmarks at policy weights.

Source: Bank of New York Mellon



### Total Fund Market Value = \$100.3 billion



Dollar Amounts in Billions / Percent of Total Fund

Source: Bank of New York Mellon

Differences in totals are due to rounding



	<b>VRS Return</b> (as of December 31, 2022)
1-year	-5.3%
3-year	7.4%
5-year	7.1%
10-year	8.1%
15-year	5.9%
20-year	8.1%
25-year	7.0%

Source: Bank of New York Mellon